

ABSTRACT

A method and system makes inlining decisions that are efficient for subprograms that have significantly varying execution times over a range of variables or execution paths. A subprogram of a computer program is identified and certain execution paths of the subprogram are selectively inlined. The subprogram may be identified based on execution characteristics of the subprogram. The selective inlining of the execution paths may be based on execution characteristics of the paths. The paths may be selectively inlined based on an inline indication associated with an execution path, where the inline indication may be an inline directive. The inline directive may be included as part of a program comment statement. A compiler makes determinations whether to inline a specific execution path of a subprogram by evaluating certain information supplied in conjunction with the path. By supplying information in association with the subprogram path, the compiler may more easily determine the various execution characteristics of the execution paths and may inline or not based on the execution characteristic indication associated with the subprogram execution path.